

Amendments to the Specification

Please replace the paragraph beginning at page 6, line 4 with the following amended paragraph:

FIG. 6a is a series of histograms showing the levels of apoptosis in Thy-1<sup>+</sup>B220<sup>+</sup> splenocytes cultured *in vitro* for 0 (left panels) or 6 hours (middle panels) with 2A or control IgG. The histograms in the right panels show the levels of apoptosis in CD69 expressing DNTC after treatment with 2A or IgG. FIG. 6b is a graph showing the number of anti-DNA-secreting B cells spleens from B6/lpr mice one week after treatment with 2A. The data are shown as anti-DNA-secreting B cell number per ten thousand B cells. FIG. 6c contains scatter plots produced by flow cytometry, showing the level of IFN- $\gamma$  production in T cells from B6/lpr mice treated with 2A or control IgG. FIG. 6d is a series of scatter plots produced by flow cytometry, showing the ~~CD11b<sup>+</sup>GR-1<sup>+</sup>~~ CD11b<sup>+</sup>Gr-1<sup>+</sup> cell population in B6/lpr mice treated with 2A or IgG. All of the above results are representatives of three experiments. FIG. 6e is a graph showing the level of IgG anti-DNA in sera from MRL/lpr mice treated with 2A and/or anti-IFN- $\gamma$  (n=3).

Please replace the paragraph beginning at page 29, line 29 with the following amended paragraph:

To test whether B cell depletion was IFN- $\gamma$ -dependent, mice were treated with anti-IFN- $\gamma$  in combination with 2A. The combinatorial treatment reversed the effects of treating B6/lpr mice with 2A alone, such that macrophage/granulocyte expansion was decreased and B cell percentages were increased. Anti-IFN- $\gamma$  treatment alone showed no effect. This result suggested that depletion of autoreactive B cells by 2A treatment is IFN- $\gamma$ -dependent. In accordance with this finding, the combined treatment also reversed the reduction of autoantibody IgG anti-DNA levels that was initially observed when MRL/lpr mice were treated with 2A alone (Fig. 6e). When 2A treatment was combined with anti-GR-1 administration, a greater expansion of ~~CD11b<sup>+</sup>GR-1<sup>+</sup>~~ CD11b<sup>+</sup>Gr-1<sup>+</sup> cells was observed, accompanied by a significantly more dramatic reduction of the B population. These results implicate a role for ~~CD11b<sup>+</sup>GR-1<sup>+</sup>~~ CD11b<sup>+</sup>Gr-1<sup>+</sup>

cells in mediating B cell depletion. To directly test this hypothesis, *in vitro* experiments were performed to confirm that B cell apoptosis was induced by IFN- $\gamma$  activated macrophages. Splenocytes from B6/lpr mice were cultured with or without peritoneal macrophages in the absence or presence of varying doses of IFN- $\gamma$ . At 18 and 40 hours, splenocytes were harvested for detection of apoptosis by staining with FITC-labeled Annexin V and cell surface markers. These experiments demonstrated that in the presence of IFN- $\gamma$ , macrophages greatly enhanced B cell apoptosis (Table 1). In the absence of macrophages, however, increasing the dose of IFN- $\gamma$  alone did not augment B cell apoptosis.